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Understanding Interprofessional Perceptions and Experiences: An Investigation of Professional Counselors and Allied Health Professionals

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Abstract

INTRODUCTION Interprofessional collaboration is essential to improve coordination, communication, quality, and safety of patient care. Interprofessional perception is an important variable in interprofessional collaboration as it can impact attitudes, ability to successfully engage in interprofessionalism, and willingness to engage. The study focuses on understanding perceptions and experiences of interprofessional collaboration of professional counselors and other allied health professionals.

METHODS Participants were recruited online and through snowball sampling. The survey was taken by a diverse sample of healthcare professionals. The survey items consisted of demographic information, the 18 item Interprofessional Education Perception Scale (IEPS), and the 16 item individual construct subscale for the Perception of Interprofessional Collaboration Model Questionnaire (PINCOM-Q). Chi-Square and one-way analysis of variance (ANOVA) was used to compare the groups on the IEPS and the PINCOM-Q.

RESULTS Results suggested that 31% of professional counselors had previous interprofessional education (IPE) and 41.4% reported that they had engaged in interprofessional clinical experience, and the majority of counselors have positive perceptions of interprofessional collaboration. Results from the ANOVA indicated that counselors have similar professional perceptions as other behavioral health professionals, however their professional beliefs are different from that of other allied health professionals.

CONCLUSION Professional counselors are gaining experiences with interprofessionalism and seem to have positive perceptions of interprofessional collaboration. It is thought that the inclusion of professional counselors on interprofessional teams will not only affect the teams positively but also the clients that are served.

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Implications for Interprofessional Practice

- Counseling programs lack a focus on interprofessional education and practice. The findings from the study can be used to promote interprofessional education and practice in counseling programs.
- In addition, these findings suggest counselors hold a favorable view towards interprofessional collaboration. This can encourage further placements of counselors-in-training in such settings to increase their interprofessional experience.
- Furthermore, for other professional groups to include professional counselors on these interprofessional collaboration teams, awareness of the skills, knowledge, training, licensure, and scope of practice for professional counselors must be brought to the awareness of other professional groups in healthcare through education and clinical experiences.
- Lastly, continued efforts towards and need for interprofessional education and practice, can lead to changes in the accrediting standards set by CACREP, to incorporate interprofessionalism in all counseling programs.
- Describe implementation of an IPE activity in a challenging setting due to the rural location and lack of access to traditional health care facilities and disciplines

Introduction

Interprofessionalism, a paradigm for integrated social service and healthcare practice, is defined as "two or more professions working together as a team with a common purpose, commitment and mutual respect" (Dunston et al., 2009, p.6). Advances in health care practice and policy encourage practitioners to avoid operating in discipline-specific silos in favor of regular communication and collaboration with other professionals involved in the provision of care to a shared client population (Pecukonis, 2014). Shifts in the way that mental health issues, chronic diseases, and provisions of culturally-competent services to diverse populations are viewed have led to increased emphasis on service coordination across settings, disciplines, and communities of practice (Grumbach & Bodenhelmer, 2004). These healthcare trends have led to the development and expansion of the interprofessional movement in the areas of research, education, training, and direct care (IECEP, 2011). However, complicating these new developments are practitioners who are either: a) not professionally ready to operate from an interprofessional perspective, b) have limited experience operating interprofessionally, and/or c) have negative attitudes towards interprofessional collaboration (Freshwater, Cahill, & Essen, 2013). These negative attitudes have sometimes been linked back to siloed educational experiences in graduate school, misperceptions of other professions, or limited access to interprofessional collaboration in clinical settings (Johnson, Fowler, Kott, & Lemaster, 2014). Strides have been made toward improving education experiences (e.g. IOM report on health professions education; Knebel & Greiner, 2003) and incentivizing interprofessional collaboration in practice settings, such as the use of bundled payments and penalties for hospital re-admittance. In addition to the practice changes mentioned above, research has highlighted perceptions of interprofessional providers, such as social workers and psychologists, in an attempt to understand perceptions from different behavioral health professions. Unfortunately, professional counselors who hold graduate degrees in counseling have been absent from the research literature in terms of their perceptions and experiences (Hawk et al, 2002; Sargeant, Loney, & Murphy, 2008). Perception is an important variable in the discussion of interprofessionalism because positive or negative perceptions can influence attitudes, ability to successfully engage in interprofessionalism, and willingness to engage (Johnson, Fowler, Kott, & Lemaster, 2014; Johnson, Haney, & Rutledge, 2015; Leaviss, 2000).

Interprofessionalism

Interprofessional collaboration is an approach that was introduced to health care in the 1970s to improve coordination, communication, quality, and safety of patient

care (Bridges et al., 2011; Conn et al., 2012). According to Reeves et al. (2010), interprofessional collaboration is a process for communication and decision making that enables the separate and shared knowledge and skills of care providers to synergistically influence the patient care provided. This process involves different professional groups working together and negotiating expertise in order to make positive contributions to health care (Zwarenstein, Goldman, & Reeves, 2009). In addition, Arredondo et al. (2004) provided a comprehensive definition of interprofessional collaboration:

> Interprofessional collaboration refers to education, training, scholarship, practice, and other professional activities that prepare and call for professionals to work: (a) in a respectful, collaborative, integrative, and informed manner with members of other disciplines and professions; and (b) with individuals, groups, systems, and organizations that may have diverse values, ethical perspectives, or worldviews, and accountability to different constituencies (p. 789).

The counseling profession is increasingly emphasizing collaboration as a best practice strategy for addressing social issues across school, family, and community levels (Lopez-Baez & Paylo, 2009). However, lack of clarity of professional roles and responsibilities from related disciplines and conflict over power and identity have led interprofessional collaborations to rarely involve professional counselors (King & Ross, 2003). Additionally, stereotypes and misperceptions about professional roles and professional identity can impede collaborative efforts between counselors and other related professionals (Johnson, Fowler, Kott, & Lemaster, 2014; Mellin, Hunt, & Nichols, 2011). Despite the challenges, professional counselor involvement in interprofessional collaboration can increase advocacy for the profession and clients (Myers, Sweeney, & White, 2002).

Interprofessional Perceptions and Experience

Interprofessional perceptions can be defined as social categorical judgments and are similar to stereotyping (Turner, 1999). Perceptions that health care providers have about one another are not all harmful and are considered a natural human process (Lidskog, Lofmark, & Ahlstrom, 2008). However, negative perceptions and positive perceptions can either inhibit or enhance the group process. Understanding held perceptions allows organizations to work within the scope of the provider and also assist in garnering appropriate training for providers. As an example, Pollard and Miers (2008) reported on a longitudinal study of ten different professions after an interprofessional education intervention and found that perceptions of interprofessionalism changed for students who went through the intervention. Specifically, students' negative perceptions (or stereotypical views) shifted after the interprofessional intervention, and students reported more positive perceptions of interprofessionalism 9-12 months out of school. In addition, Pollard et al. (2006) found that as students many held negative perceptions about interprofessional interaction, but as qualified practitioners views shifted and individuals reported more positive perceptions. An interpretation of the results provided by the authors indicated that the opportunities for students to engage in interprofessional interaction is limited because they are not qualified practitioners and are usually in a supportive role and not in the role of independent provider (Pollard et al., 2006). This study and a later study highlight the importance of interprofessional experience as an indicator of positive or negative perceptions of interprofessional collaboration (Pollard et al., 2006).

Interprofessional experience is defined as professional training (e.g. workshops, continuing education), educational experiences, or professional provider services (e.g. counseling professionals working in an integrated care clinic with nurses and physicians) with people from other disciplines and professions. Many studies that look at interprofessional experience look at one indicator such as education or practice and very few if any include professional counselor' in training (Johnson, Haney, & Rutledge, 2015). However, experience with interprofessionalism as a student has a positive impact on relevant skills, interprofessional relationships, and other professional interactions (Pollard & Miers, 2008). Mu, Chao, Jensen, and Royeen (2004) found that in their group of 111 students interprofessional experience (e.g. interprofessional education intervention) had a positive impact on perceptions and attitudes of interprofessionalism. Similar to the benefits for students, benefits for professionals are positive and influence professional identity, overall professionalism, and attitudes towards interprofessional collaboration (Furze, Lohman, & Mu, 2008; Johnson, Haney, & Routledge,

2015, Mellin, Hunt, & Nichols, 2011; Pollard & Miers, 2008). Furthermore, countless studies have found an overall positive impact on the healthcare system and for clients/patients when providers have an interprofessional perspective on provision of services (World Health Organization, 2008; Zwarenstein, Goldman, & Reeves, 2009).

The combined findings imply that interprofessional perceptions are important and impact attitudes of interprofessionalism but dually important are the experiences people have with interprofessionalism; unfortunately the literature is lacking in the understanding of professional counselors' experience and perceptions of interprofessionalism. One empirical study found that after an interprofessional education experience over the course of one full semester counseling students reported feeling more prepared for interprofessional collaboration (Johnson, Haney, & Rutledge, 2015). Another study on educational experience found that students in social work, clinical psychology, and physical therapy had a change in attitude toward interprofessional collaboration after a case-based educational experience (Wellmon, Gilin, Knauss, & Linn, 2012). The studies above focused on education as the indicator of experience with graduate level students. However, there has not been a focus on professional counselors' experiences with interprofessionalism or their perceptions of the emerging paradigm. These factors are important because experience and perceptions of interprofessionalism are an indicator of readiness to practice from an interprofessional perspective (Johnson, Haney, & Rutledge, 2015; Wellmon, Gililn, Knauss, & Linn, 2012).

Rationale

To date, no empirical evidence has been published demonstrating the readiness of professional counselors to practice from an interprofessional paradigm based on their level of current and past experience and perceptions of interprofessionalism. In addition, professional counselors have not been included in previous studies that seek to understand perceptions of interprofessionalism from different professional groups. With recent changes in policies permitting professional counselors to practice in Veterans' Administration programs or settings, to be reimbursed through TRICARE, and other developments increasing the ability of counselors to practice in settings where interprofessionalism may be considered the norm, it is vital to have some understanding of how professional counselors perceive this emerging social service and healthcare standard. Even with the shift in thinking towards interprofessionalism some of these models are not working because of negative professional attitudes toward interprofessionalism and or limited to no knowledge of interprofessionalism. This study focuses on understanding the experiences and perceptions of interprofessionalism of professional counselors and other allied health professionals. The research questions are:

(1) What are the interprofessional experiences of healthcare providers and do levels of experience vary by profession?
   (a) Hypothesis: Yes, level of experience with interprofessionalism will vary by profession.
(2) Do professional groups vary in their perceptions of interprofessionalism?
   (a) Hypothesis: Yes, perceptions of interprofessionalism will be varied based on profession.

This study sought to understand the perceptions and experiences of interprofessionalism from a national sample of health professionals from across the United States. In addition, the research hopes to better understand professional counselors' experiences with interprofessionalism.

Methods

Procedure

Human subjects approval was provided for this study under an exempt category from the author's institutional review board and, three days after, participant recruitment started. Participants were recruited via online listservs and email lists from the various professions in June of 2015. Specifically, counselors were recruited from the national organization and CESNET. Dental hygienist and human service professionals were recruited from their national associations. Psychologists, social workers, nurses, and physical therapists were recruited from national professional listservs available online and via snowball sampling. The survey was advertised on internet forums designed for specific

professional communities including counselors, social workers, nurses, physical therapists, human service workers, and dental hygienists. This recruitment method was chosen to garner the most diverse sample possible. Recruitment was ongoing for four weeks with one post to listservs a week, and the survey closed after forty five days. A response rate was not calculated because of the use of listservs and snowball sampling.

Participants

There was a total of 509 responses to the survey, 3.1% accounted for missing data (16 cases), for a total of 493 valid responses. Participant demographics are displayed in Table 1 and included professions, which had seven categories, and others, which included persons in higher education, exercise science, pharmacy, public health, yoga instruction, and other professions with less than 5 representatives for each category. In addition, age, gender, race, education, and work experience is included in Table 1. Another form of diversity was home location in which respondents represented and it included rural (n=111), suburban (n=245), and urban (n=137) locations.

Measures

Participants completed three questionnaires using a secured online website (esurveyspro). The first questionnaire was a demographic survey that also included three interprofessional description questions (IDQ). The interprofessional description questions were: (1) Have you had previous interprofessional education experiences during your degree program for credit hours, (2) Have you had interprofessional clinical experiences, with answer choices being Yes or No, and (3) How much of your time is spent in interprofessional collaboration in a given 40 hour work week, with seven possible answer choices ranging from 0% to 100%. The third question had responses in which cell sizes were uneven and some had less than 5 respondents, in response, data was collapsed to create three categories (i.e. low engagement 0-10%, mid-level engagement 11-50%, and high level engagement 51-100%) of time spent on interprofessional collaboration. The second questionnaire is the 18 item Interprofessional Education Perception Scale (IEPS; Luecht, Madsen, Taugher, & Petterson, 1990), and the last scale is the 16 item individual construct subscale for the Perception of Interprofessional Collaboration Model Questionnaire (PINCOM-Q; Odegård & Strype, 2009).

Perception of Interprofessional Collaboration Model Questionnaire (PINCOM-Q; Odegård & Strype, 2009) was developed to measure perceptions and behaviors between professionals in the interprofessional collaboration process on an individual, group, and organizational level. PINCOM-Q consists of 48 items with a 7-point scale to determine individuals' perceptions of interprofessional collaboration. Within the measure there are 12 subscales; for this study we utilized the Individual Construct, which is 4 subscales: (C1) motivation, (C2) role expectancy, (C3) personality style, and (C4) professional power. In the original development of the study, the Cronbach's alpha for all 48 items is 0.91. The current study only used the individual construct (C1, C2, C3, C4) because participants were not currently involved in an interprofessional group activity, therefore assessing organizational and group domains are not necessary. Each item is framed as a statement such as "it is common that interprofessional collaboration is highly valued" rating on a 7-point Likert scale from (1) strongly agree to (7) strongly disagree. A prior study found a Cronbach's alpha for the individual construct of .793 (Rousseau et al., 2012). For the current study the .77 is the Cronbach's alpha for the individual construct (C1-4, items 1-16).

Interdisciplinary Education Perception Scale (IEPS; Luecht, Madsen, Taugher, & Petterson, 1990) is an eighteen-item scale that assesses participant attitudes towards persons in other professions. The IEPS uses a 6-point Likert scale ranging from "strongly agree (6)" to "strongly disagree (1)" and includes four subscales: (1) Professional competence and autonomy (items 1, 3, 4, 5, 7, 9, 10, & 13) where a high score indicates that the participant believes his or her own profession is well educated and contributes significantly to the healthcare field; (2) Perceived need for professional cooperation (items 6 & 8) where a high score reflects that the participants believe in the need of other professions to work collaboratively; (3) Perception of actual cooperation (items 2, 14, 15, 16, 17) and a high score indicates participants believe that their profession works well with other professions; and (4) Understanding the value and contribution of other professions (items 11, 12, & 18) where a high score indicates that the participant values other professions' contributions. An

original study by Luecht et al. (1990) found acceptable internal consistency reliabilities for the four subscales 0.872, 0.563, 0.543, and 0.518 respectively and a total scale alpha of 0.872. The scale performs consistently better as a total scale (Goelen, DeClereq, Huyghens, & Kereckhofs, 2006; Neill, Hayward, & Peterson, 2007); the current study did not use the subscales in any separate analysis. The Cronbach's alpha for the 18 items for this study is .89.

Data Analysis

To answer research question one, which focuses on health professionals' level of interprofessional experience and whether that experience varies by profession, cross tabulation and Chi-square test for independence was used to explore the relationship between professions and interprofessionalism (IDQ). To answer research question two, which focuses on the perceptions of interprofessionalism from health professional groups, data was collapsed and two ANOVAs were conducted using the IEPS and the PINCOM-Q respectively. Specifically, the professions' data which was six levels was collapsed into three groups. The groups were 1=Counselors (n=79), 2=Allied Health Professions (n=153, dental hygiene, nursing, and physical therapy), and 3=Other Behavioral Health Related Professions (n=174, human services, psychology, and social work). The other category was coded as system missing. Data was collapsed to test for unique differences between counselors and other health professionals. A total of 406 cases were used in this analysis. Following the collapse of the data a one-way analysis of variance was used to compare the groups on the IEPS and the PINCOM-Q.

Results

Cases were excluded when there was missing data (n=16), for a total of 493 cases in the final analysis. Prior to analysis, the issues of normality and outliers were checked, and the data were normally distributed with no outliers. Table 1 is the demographic table and provides a detailed description of the participants. The sample was composed of 82% women, 31% between the ages of 21-39, 70% White American and 17% Black American, 36% had 20 plus years of work experience, 59% had graduate degrees, 54% had the highest license in their field, and 83% of the participants indicated that they spent less than 50% of their time in an average work week involved in interprofessional collaboration.

Table 1

Demographics (N=493)

Characteristic	N	%
Age		
20 and under	4	.8
21 to 39	158	31.0
40 to 49	101	19.8
50 to 59	142	27.9
60 to 69	80	15.7
70 and older	8	1.6
Gender		
Male	73	14.3
Female	417	81.9
Transgender	3	.6
Race		
Hispanic	20	3.9
American Indian	7	1.4
Asian	6	1.2
Black	86	16.9
White	355	69.7
Bi-racial	19	3.7
Education		
High School	39	7.7
Associates	65	12.8
Bachelors	89	17.5
Masters	165	32.4
Post Masters	26	5.1
Doctoral Degree	109	21.4
Work Experience		
Less than 1 year	86	16.9
2 to 5 years	69	13.6
6 to 10 years	60	11.8
11 to 15 years	44	8.6
16 to 20 years	49	9.6
20 plus years	182	35.8
Professions		
Professional Counseling	87	17.1
Dental Hygiene	37	7.3
Nursing	133	26.1
Physical Therapy	7	1.4
Human Service Workers	134	26.3
Psychology	43	8.4
Social Work	25	4.9
Other	27	5.3

Experience with Interprofessionalism

In order to explore engagement with interprofessionalism, participants were asked three questions on the demographic questionnaire (IDQ). Results from the cross tabulation focused on profession and interprofessional education (IPE) found that 31% (n=27) of professional counselors indicated that they had previous interprofessional education experience, as compared to 13.5% (n=5) dental hygiene, 26.3% (n=35) nursing, 42.9% (n=3) physical therapy, 23.9% (n=32) human services, 25.6% (n=11) psychology, 32% (n=8) social work, and 7.4% (n=2) in the other category. While physical therapy had the highest percent, they had the lowest overall response rate (n=7). A Chi-square test for independence indicated no significant association between profession and interprofessional education, X2(1, n = 493) = 10.82, p = .09, phi = .14. Because no significant association was found using a chi-square test, no further interpretation of the residuals was completed, which is consistent with controlling over Type I errors (Agresti, 2002).

Results from the cross tabulation focused on professions and interprofessional clinical collaboration found that 41.4% (n=36) of professional counselors indicated that they have engaged in interprofessional clinical experiences, compared to 21.6% (n=8) in dental hygiene, 41.4% (n=55) nursing, 85.7% physical therapy (n=6), 13.4% (n=18) in human services, 20.9% (n=9) psychology, 36% (n=9) social work, and 25.9% (n=7) in the other category. A Chi-square test for independence indicated a significant association between profession and interprofessional clinical experiences, X2(1, n = 493) = 44.93, p = .000, phi = .30. Using Cohen's (1988) criteria, this is a medium effect size, which indicated a moderately strong correlation between profession and interprofessional clinical experience. To understand which professional group caused the statistically significant difference the residual was calculated, converted to a z-score, and compared to a critical value of 1.96 Formula:

$$z = \frac{f_o - f_e}{\sqrt{f_e(1 - rowproportion)(1 - Columnproportion)}}$$

Results of the post hoc investigation found that Human service professionals contributed the most to the significant chi-square test with a standardized residual of -3.5, which is lower than the critical value (-1.96), which means fewer human service professionals than expected answered that they have interprofessional clinical experience. Additionally, the standardized residuals nursing (2.4) and physical therapy (2.7) were higher than the critical value, which means more people in these categories answered that they have interprofessional clinical experience than was expected.

Lastly, to understand the percentage of time spent engaged in interprofessional collaboration each week by different professions, data was collapsed and cross tabulation and a chi-square test were conducted. The interprofessional time variable was seven categories, and the data was collapsed to create three categories (i.e. low engagement 0-10%, mid-level engagement 11-50%, and high level engagement 51-100% of time spent on IPC). Data showed that only 9.8% (n=6) of counselors fit in the high engagement category, 9.1% from dental hygiene (n=2), 28.3% nursing (n=30), 26.4% human services (n=19), 20% psychology, 19% (n=5) social work (n=4), and 25% (n=5) other.

A Chi-square test for independence indicated a significant association between profession and time spent on interprofessional collaboration each week, X2(1, n = 334) = 26.54, p = .02, phi = .28. Using Cohen's (1988) criteria, this is a medium effect size, which indicated a moderately strong correlation between profession and time spent on interprofessional collaboration each week. The residual was calculated, converted to a z-score, and compared to a critical value of 1.96. Results of the post hoc investigation found that dental hygiene professionals contributed the most to the significant chi-square test with a standardized residual of 2.3, which is higher than the critical value (1.96), which means more dental hygiene professionals than expected are in the category of "low engagement" with interprofessional collaboration by week. Additionally, the standardized residual for counseling (-1.9) is interpreted to mean that fewer counselors identified as being in the high engagement with interprofessional collaboration weekly than expected.

Table 2: Relationship between Profession and IP Clinical and Education Experience

Interprofessional Clinical Experience	**No**	**Yes**
Counseling	51	36
Dental Hygiene	29	08
Nursing	78	55
Physical Therapy	1	06
Human Services	116	18
Psychology	34	09
Social Work	16	09
Other	20	07
Total	345	148
Interprofessional Education		
Counseling	60	27
Dental Hygiene	32	05
Nursing	98	35
Physical Therapy	04	03
Human Services	102	32
Psychology	32	11
Social Work	17	08
Other	25	02
Total	370	123

Table 3. Interprofessional Collaboration Engagement by Profession

	Low	**Mid**	**High**	**Total**
Counseling	26	29	6	61
Dental Hygiene	14	6	2	22
Nursing	31	45	30	106
Physical Therapy	4	3	0	7
Human Services	16	37	19	72
Psychology	12	8	5	25
Social Work	7	10	4	21
Other	7	8	5	20

*low engagement 0-10%, mid-level engagement 11-50%, and high level engagement 51-100% of time spent on IPC in one work week.

Perceptions of Interprofessionalism

Two one-way between-groups analysis of variance were conducted to explore the impact of profession on perceptions of interprofessionalism as measured by participants' scores on the IEPS and PINCOM-Q. The IEPS and the PINCOM-Q were found not to correlate to each other, therefore two separate one-way ANOVAs were conducted. Profession was coded into 3 groups: Group 1 included all participants identifying as counselors, Group 2 included allied healthcare professionals (e.g., nurses, dentists, and physical therapist), and Group 3 included other behavioral health professionals (e.g., psychologists, social workers, human services, etc.).

In order to understand the difference in professional perceptions of interprofessionalism, a one-way between groups ANOVA was conducted. The Levene's test for homogeneity of variance showed that the assumption of homogeneity of variance was not violated (Levene statistic 1.61, sig.200). The ANOVA indicated statistically significant difference at the p<.000 level in IEPS scores for the three professional groups: F (2, 403) = 8.25, p = .000. The effect size, calculated using eta squared, was .03. Post-hoc comparison using the Tukey HSD test indicated that the mean score from Group 1 (M = 78.58, SD = 8.39) counselors, was significantly lower than Group 2 (M = 81.83, sd = 9.1) allied health professionals. Along similar lines Group 3 was also found to be significantly different from group 2 with a mean difference of -4.24 (std. error 1.06). However, Group 1 (counselors) did not differ significantly from Group 3 (M = 77.58, SD = 10.53) other behavioral health professions. This indicates that counselors have similar professional perceptions as other behavioral health professionals. However, their professional beliefs are different from that of allied health professionals.

In an attempt to understand the difference in personal perceptions of interprofessionalism, a one-way ANOVA was conducted and the three professional group mean scores on the PINCOM-Q were very closely related and were not statistically different at the .05 level: F(2, 349) = .205, p =.81. The means were as follows: counselors (Group 1) M = 43.50 SD=9.04, medically related professions (Group 2) M=43.14 SD 8.19, and other behavioral health related professions (Group 3) M=42.72 SD 8.7. In addition, the assumption of homogeneity was not violated (Levene statistic .463, Sig.630). Therefore personal perceptions of interprofessionalism amongst healthcare professional groups were found to be similar.

Discussion

This research sought to add to the current body of knowledge that explores health professions, specifically professional counselors' perceptions and experiences with interprofessional collaboration. The exploration of experiences with interprofessionalism is important in understanding a practitioner's readiness to engage in interprofessional collaboration (Johnson & Freeman, 2014; Johnson, Haney, Rutledge, 2015; Wellmon, Gilin, Knauss, & Linn, 2012). The more experiences professionals have with interprofessional collaboration and education, readiness to practice interprofessionally rises (Johnson, Haney, & Rutledge, 2015; Fowler & Hoquee, 2016). In addition perceptions of interprofessionalism link back to how well a team may work together or how likely professions are to engage others in interprofessional collaboration (Johnson, Fowler, Kott, & Lemaster, 2014). These key pieces, experiences and perceptions, are important to understand and because professional counselors are the newest profession to enter into the interprofessional arena it's dually important to understand their perspectives.

The accrediting body for Counseling and Related Educational Programs does not make it mandatory for programs in counseling to have modules on interprofessionalism (CACREP, 2009). However, allied and medical health professionals are required to gain these competencies in their degree programs (Verma, Paterson, & Medves, 2006). Despite these educational differences, professional counselors reported having similar levels of interprofessional education experiences as their healthcare counterparts. Many of these educational experiences for allied health professionals and other behavioral health professionals occur during simulations, such as standardized patient simulations (Johnson, Haney, & Rutledge, 2015) or through actual educational modules (Buckley et. al., 2012). Buckley et. al. (2012) found that in health professions, interprofessional collaboration is covered comprehensively throughout their educational programs. In professional counseling pedagogy there are no studies tracking the amount of interprofessional education experiences, and there is no information readily available online

that shows how professional counselors' gain interprofessional education. Despite the facts, this current study found that professional counselors are engaging and/or receiving interprofessional education. This finding is unique in the literature, with other research conceptually emphasizing the importance of interprofessional education competencies for professional counselors (Johnson & Freeman, 2014) or emphasizing the importance for counselors to be knowledgeable about interprofessionalism (Arredondo, Shealy, Neale, & Winfrey, 2004; Arthur & Russell-Mayhew, 2010).

Another gap in the literature is related to professional counselors' interprofessional clinical experiences. In the literature there are very few studies with professional counselors involved in interprofessional clinical experiences. There are studies with social workers, psychologists, and many studies within medical related professions, but somehow professional counselors are not represented in this research and perhaps not on these teams (Odegard, 2007; Zwarenstein, Goldman, & Reeves, 2009). The current study, however, found that professional counselors are currently or have been engaged in interprofessional clinical experiences more often than their behavioral health counterparts (i.e. psychology and social work) and similar to their nursing counterparts. These results are surprising, and lead researchers to believe that there is a practice-to-research gap; professional counselors are engaging in interprofessional collaboration. However, research is not being published on these interactions. When specifically asked about interprofessional engagement on a weekly basis very few professional counselors were in the high engagement group, which was interpreted to mean that more than 50% of the work week is spent engaged in interprofessional collaboration. This finding is not surprising because professional counselors typically would spend their workweek in their settings and the majority of professional counselors work in counselor specific settings (Myers, Sweeney, & White, 2002). In order for professional counselors to participate in interprofessional collaboration effectively, they must become flexible and tolerant of embracing new work environments (Nash, McKay, Vogel, & Masters, 2012). These combined results highlight two important findings: 1) professional counselors are receiving interprofessional education and 2) they are engaging in interprofessional collaboration at some level on a weekly basis.

Lastly, perceptions of interprofessionalism was assessed by self-reported profession. The professions were collapsed into three groups to understand the differences, if any, between professional counselors, other behavioral health specialties, and allied health professions. On the measure of professional perceptions of interprofessionalism (IEPS; Luecht, Madsen, Taugher, & Petterson, 1990) the current study found that professional counselors' perceptions of interprofessionalism were statistically different from allied health professions, but they were statistically similar to other behavioral health related specialties. These findings, while not surprising, are interesting because they highlight how similar behavioral health professions are (Cohen et al., 2015); despite how the professions are categorized there are underlying similarities among psychologists, social workers, and professional counselors. In other studies on professional identity, counselors, when prompted, were able to distinguish themselves from other behaviorists such as psychologists and social workers (Mellin, Hunt, & Nichols, 2011). However, in the current study, when not prompted, professional counselors responded similarly to their behavioral health counterparts.

Limitations and Future Research

Several limitations are noteworthy and should be considered in this study: (1) recruitment method, (2) participant demographics, and (3) interprofessional measures. The recruitment method chosen involved surveying persons who were members of professional listservs. This recruitment method was limited, in that it did not consider persons who were not a part of professional listservs or persons who were not technologically savvy. This may have impacted the results by unintentionally excluding qualified participants and perhaps even older professionals. Future research should attempt to expand recruitment efforts through contacting local and national agencies, having a paper based format, and advertising the survey in clinic settings. Participant demographic limitations arose through a less than equitable dispersion of ethnic characteristics. The sample was majority participants who identified as White (n=355). This finding is similar in other like studies. However, in future research greater effort should be made to increase diversity. The authors suggest using listservs specifically for minority clinicians. In addition, because all professions were not represented equally, greater attention must be paid to

recruitment efforts of all professions. Finally, the interprofessional measures were not related. This limitation may be related to the construct of interprofessionalism being difficult to define or defined in many ways or directly to the measure. Future research should investigate how the concepts measured in the IEPS differ from concepts measured in the PINCOM-Q. In addition to the future research objectives presented above, it is important that additional research start to expand on this work with time series designs. Time series designs can assist in understanding how perceptions of interprofessionalism change before and after continuing education or after clinical interprofessional team encounters.

Implications for Professional Counselors

Under mounting pressure from several healthcare advocacy groups and organizations, the Affordable Care Act [ACA] became law on March 2010 and was fully implemented on January 2014. The act aimed to improve the fairness, quality, and affordability of health insurance coverage and it fosters collaboration between various health care systems directly through the integrated care model (Rosenbaum, 2011; Shaw, Asomugha, Conway, & Rein, 2014). The impact on professional counselors was unprecedented because one of the largest expansions of the ACA is toward mental health and substance use disorder coverage (Rosenbaum, 2011). This expansion of healthcare policy will thrust professional counselors into interprofessional collaboration, and it's important that they are prepared (Wilkinson, 2014). Dually important are that other healthcare providers understand the important role that professional counselors can play on these integrated care teams. In order for other professional groups to include professional counselors on these interprofessional collaboration teams, awareness of the skills, knowledge, training, licensure, and scope of practice for professional counselors must be brought to the awareness of other professional groups in healthcare through education and clinical experiences.

Professional counselors who are engaged in interprofessionalism should start to write on the topic and discuss their experiences. This exposure is not only beneficial to the profession of counseling but to other healthcare providers. The ability for healthcare providers to learn about and from counselors is professionally beneficial for others and the clients they serve. Some research on interprofessionalism point to exposure as being important for providers; specifically exposure to other types of healthcare professionals (Johnson, Fowler, Kott, & Lemaster, 2014). Exposure allows for providers to understand how to utilize different professions in their practices and in their work settings, which will benefit patients.

Because healthcare is changing so quickly, and integrated care and interprofessionalism are becoming the norm perhaps accreditation standards should begin to change to adjust to these new developments. Allied health professionals in nursing, dental hygiene, physical therapy, pharmacy, and many other medically related health professions have professional standards that address interprofessionalism. These professional standards require curriculum to reflect the changing scope of healthcare, including continuing education requirements (http://www.jointaccreditation.org/). While the current research study found that professional counselors were receiving education in the area of interprofessionalism, standardizing what this education should reflect and standardizing this requirement across degree programs is imperative. Showing other healthcare related professional groups that counseling and counselors value interprofessionalism by reflecting this in educational standards places the profession of counseling in the same arena as other healthcare professions.

Conclusion

Professional counselors are gaining experiences with interprofessionalism and seem to have positive perceptions of interprofessional collaboration. The basic counseling skills that are taught throughout counseling programs equip professional counselors with the knowledge and skills needed to engage in interprofessional collaboration effectively. At this point a reflection of this knowledge in accreditation changes, or curriculum modifications, will show other professions the competencies counselors possess. The inclusion of professional counselors on interprofessional teams will not only affect the teams positively, but also the clients that they serve.

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